November 2008

# Agriculture News
# Yellowstone County Extension

http://www.co.yellowstone.mt.us/extension/ag/

TO: Farm & Ranch Businesses

FROM: Steve Lackman
Yellowstone County Agricultural Agent

## A Message From Steve

Serving Yellowstone County as the new Agricultural Agent continues to be a great privilege and I look forward to meeting everyone. I farmed on the westend of Billings for many years with my brother Dan and father Bill. In this November newsletter I have included articles and charts which I feel may be of use to you this time of the year. Please feel free to stop by the Extension office or give me a call with your Ag related questions.

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## Ecology & Management of Russian Olive

**Jeff Mosley and Brent Roeder**

**Department of Animal and Range Sciences, MSU Extension Service**

Plant Identification

Russian olive is a large shrub or small tree that has silvery leaves, small silver-colored fruits, and thorny branches.

Similar native plants include silverberry, buffaloberry, and silver buffaloberry.

Silverberry is a much shorter root-sprouting shrub. Its younger stems are dark rather than soft and silvery as with Russian olive. Silverberry does not have thorns.

Buffaloberry and Silver buffaloberry leaves have an opposite arrangement, whereas Russian olive leaves have an alternate leaf arrangement. Branches of buffaloberry are not throny. Silver buffaloberry brances often end in thorns. Silver buffaloberry fruits are small, red-orange oblong berries and the leaves are silvery on both sides. Silver buffaloberry tends to form short thickets about 10 feet tall after 20 years.

Plant Characteristics

Native to southern Europe and western Asia, introduced to North America during colonial settlement.

Beginning in the early 1900s, it was planted in the western U.S. as an ornamental and for windbreaks, erosion control, ad wildlife enhancement.

Today the plant is naturalized throughout the western U.S. Plant slowly expanded in 1920s to 1970s. The plant has expanded significantly in the past 30 years and has adapted to areas with 8 inches of average annual precipitation. It's favored by spring moisture and can grow up to six feet per year.

Tolerant of salty soils, but less so than salt cedar.

Plants must be 10 years old before they are capable of producing seed. Large seeds are not wind-blown, but they do float in streams and are disseminated in feces of birds, deer, coyotes, raccoons, skunks, etc. Seeds remain viable for 1 to 3 years.

# Ecology & Management of Russian Olive (cont'd)

Does not always gown in monotypic stands (solid stands or monocultures), but it usually is monotypic on degraded sites. Can form very stable plant communities.

Stump sprouting occurs after cutting down the tree, and excavation of the entire stump can stimulate root sprouting.

Reasons for Concern

Listed as a noxious weed in Colorado, New Mexico, Treasure County in Montana and some counties in Utah.

Will creep out into irrigated fields, ditches, and canals.

Decreases forage production for cattle and wild ungulates. Branches extend to the ground and thorns make forage inaccessible.

The plant is able to fix nitrogen in its roots (like alfalfa). This enables the plant to establish on bare mineral soil. High amounts of nitrogen in leaf litter favors annuals and noxious weed on dry, salty sites.

Russian olive provides food and cover for many wildlife species. Coyotes, deer, and raccoons all eat the fruit. Robins and cedar waxwings eat a lot of Russian olive fruits in winter. However, few insects are present in solid stands of Russian olive, resulting in fewer bird species. Also, cavity-nesting birds don't use Russian olive nor do beavers.

Will establish under mature cottonwoods and willows. Seedlings are tolerant of shade. Survives in a wide range of soil conditions. When cottonwoods and willows die, new seedlings cannot establish in shade of Russian olive trees.

Control Options

**Mowing**: Effectively controls saplings. Need to mow every year.

**Foliage herbicides**: Apply in early summer when leaves are fully developed. Two to three annual re-treatments will probably be necessary.

- 2, 4-D at 1.5 to 2 quart product per acre.
- Remedy or Farlon4 (triclopyr ester) at 2 to 4 quart product /100 gallon of water for spot treatment or 1 to 2 quart product per acre for broadcast treatment.

**Cutting and Cut-Stump Treatment**: Cut trees with chain saws for tree shears, etc. Cut as close to ground as possible. With a backpack sprayer, apply herbicide to stump as soon as possible after cutting.

- Remedy or Garlon4 (triclopyr ester): 25-30% volume of product mixed with oil.
- Garlon 3A (triclopyr amine): 50:50 mix with water
- Roundup or Rodeo if applying near water (glyphosate): 0.2 to 0.4 ounces of product per stump.

**For Fact Sheets and General Ag Information Specific to Yellowstone County,**

**Please refer to our web page at:**

**http://www.co.yellowstone.mt.gov/extension/ag/**

# Corn Grain Moisture Price Adjustment*

This pricing table is based on dry matter % which has a direct relationship with energy values and storage ability.

| One bu. (lbs) | % Moisture | % Dry Matter | Factor* |
|---|---|---|---|
| 53.17 | 11 | 89 | 1.053 |
| 52.77 | 12 | 88 | 1.041 |
| 54.39 | 13 | 87 | 1.030 |
| 55.02 | 14 | 86 | 1.018 |
| 55.67 | 15 | 85 | 1.006 |
| 56.00 | 15.5 | 84.5 | 1.000 |
| 56.33 | 16 | 84 | 0.994 |
| 57.01 | 17 | 83 | 0.982 |
| 57.71 | 18 | 82 | 0.970 |
| 58.42 | 19 | 81 | 0.959 |
| 59.15 | 20 | 80 | 0.947 |
| 59.90 | 21 | 79 | 0.935 |
| 60.67 | 22 | 78 | 0.923 |
| 61.45 | 23 | 77 | 0.911 |
| 62.26 | 24 | 76 | 0.899 |
| 63.09 | 25 | 75 | 0.888 |
| 63.95 | 26 | 74 | 0.876 |
| 64.82 | 27 | 73 | 0.864 |
| 65.72 | 28 | 72 | 0.852 |
| 66.65 | 29 | 71 | 0.840 |
| 67.60 | 30 | 70 | 0.828 |
| 68.58 | 31 | 69 | 0.817 |
| 69.59 | 32 | 68 | 0.805 |
| 70.63 | 33 | 67 | 0.793 |
| 71.70 | 34 | 66 | 0.781 |

* Factor x Current Market Price = Moisture Adjuster Price (Assume 90% Dry Matter)
  Example: 1.006 x $2.89/bu. = $2.817

- Assume $1.00 per bushel in the Factor column, the price is the Factor figure. (Also the value could be $0.012 per 1% of dry matter as an average figure when it's $1.00/bushel.)

*Information originally compiled by John Ranney, retired Yellowstone County Extension Agent.

# Upcoming Ag Events

Montana State University Ag Appreciation Weekend: November 14 & 15, 2008 in Bozeman
For information contact the MSU College of Agriculture at 406-994-3618

Montana Woolgrowers Association Annual Conference: December 5 & 6, 2008 in Billings
www.mtsheep.org

Montana Stockgrowers Association Annual Convention: December 11-13, 2008 in Billings
www.mtbeef.org

2009 Sugarbeet Symposium: January 12 & 13, 2009 in Billings

Harvesting Clean Energy Conference IX: January 25-27, 2009 in Billings
www.harvestcleanenergy.org/conference/

Oilseed & Biodiesel Production Workshop: January 28 & 29, 2009 in Billings 1-800-275-6882
www.ncat.org/special/oilseeds.php

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# MSU Publications

Montana State University Extension has finished a revision of the pocket guide "Montana's Noxious Weed." It contains 32 color photos and descriptions of the state's most destructive noxious weed. Cost for the pocket guide is $4 and is available for purchase in the Extension Office.

The new Montguide "Cheatgrass Identification, Biology and Integrated Management" was published this month. The free publication was developed by Fabian Menalled, MSU Extension Cropland Weed Specialist; Jane Mangold, MSU Extension Rangeland Weed Specialist; and Ed Davis, MSU Research Associate. Copies of the publication are available in the Extension Office or may be printed off the MSU Publications website at http://extn.msu.montana.edu/publications.asp

We have posted a great article on the Yellowstone County Agricultural website entitled "Modifying Fences to Deter Big Game." http://www.co.yellowstone.mt.us/extension/ag/livestock.asp This article from Roy Fenster, M.D., MSU Extension Wildlife Associate in Animal and Range Sciences, offers research suggesting woven wire fences 6 feet high can be effective at deterring deer and elk from a potential food source. The article details how to construct and install the fence.

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# Real Time Answers From eXtension

more mind reach

MSU has developed a new online resource which is built on the firsthand knowledge and practice of experts in a particular field of study. The information they gather from their own real-life research is transferred into the eXtension database within their Community of Practice (area of expertise). Then, customized user tools help you locate the information you need. Try it out for yourself? Go to http://msuextension.org and click on the eXtension link.

Most recently a great article entitled "Hay--Be a Smart Buyer" was addressed in the eXtension section. The article discusses some of the key issues which may help a hay buyer make wiser purchases.

This is just one article of many on the site which provide current, relevant research to farmers and ranchers.

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